

Expedited Procedure Under 37 CFR 1.116

Application No. 10/588,447

Paper Dated: March 27, 2012

In Reply to USPTO Correspondence of December 27, 2012

Attorney Docket No. 4605-062316

REMARKS

The final Office Action of December 27, 2011, has been reviewed and the Examiner's comments carefully considered. Claim 1 has been amended by way of this Amendment. Claims 2 and 3 are cancelled. Accordingly, claim 1 is the sole claim currently pending in this application. Support for the amendments made herein can be found in FIGS. 1-3 and in paragraphs [0022]-[0048] appearing on pages 8-15 of the specification.

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 6,789,393 to Dais et al. (hereinafter "Dais") in view of U.S. Patent Application Publication No. 2003/0026929 to Usui et al. (hereinafter "Usui"). In view of the foregoing amendments and following remarks, reconsideration and withdrawal of these rejections are respectfully requested.

Claim 1 has been amended to incorporate the limitations of claim 2 as to the outer shell including a horizontal annular extension that extends from the distal end of the annular portion towards the center of the tubular portion and to further recite that the horizontal annular extension is formed with a distance defined between the horizontal annular extension and the bottom portion of the container body. Also, claim 1 has been amended to clarify that the annular portion has a fold so as to extend back towards an inside of the tubular portion and has a taper so as to extend towards the distal end.

Accordingly, claim 1, as amended, is directed to a heat insulating container. The container includes a container body having a bottomed tubular shape and an outer shell that is formed by a foamed resin sheet having heat shrinkability and covers a peripheral wall of the container body with a space created between the peripheral wall and the outer shell. The outer shell includes a tubular portion disposed opposite to the peripheral wall of the container body and an annular portion extending from an opening edge of a lower end of the tubular portion towards the inside of the tubular portion. The annular portion has a distal end and a proximal end, in which the distal end is located farther from an inner peripheral surface of the tubular portion than the proximal end is and the annular portion extends in an inclined orientation with respect to a peripheral wall of the tubular portion. The annular portion is formed so as to have the distal end with a space to a bottom portion of the container body so that air within the space

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heated by heated food in the container body is communicated with the outside via a lower end opening of the tubular portion, and the annular portion has a fold so as to extend back towards an inside of the tubular portion and has a taper so as to extend towards the distal end and so as to be away from the inner peripheral surface of the tubular portion. The outer shell includes a horizontal annular extension that extends from the distal end of the annular portion towards the center of the tubular portion. The horizontal annular extension is formed with a distance defined between the horizontal annular extension and the bottom portion of the container body.

The heat insulating container of claim 1, as amended, includes an annular portion extending from an opening edge of a lower end of a tubular portion towards the inside of the tubular portion, and thereby increases the stiffness of the tubular portion against a force directed towards the center of the tubular portion. Furthermore, heat insulating container according to claim 1 is structured to have a horizontal annular extension that extends from the distal end of the annular portion towards the center of the tubular portion. The horizontal annular extension is formed with a distance being defined between the horizontal annular extension and the bottom portion of the container body, thereby increasing the radial strength of the inner peripheral edge and the proximity of the edge to the annular portion to limit deformation of the inner peripheral edge.

Also, the heat insulating container according to claim 1 is formed with the bottom of the container body constantly spaced apart from the annular portion and the horizontal annular extension of the outer shell. Thus, the space defined by the container body and the outer shell is constantly opened to the outside through the space between the bottom portion of the container body and the horizontal annular extension of the outer shell. As such, the insulating container according to claim 1 allows air, which has its temperature increased within the inside space, to be released to the outside, thereby preventing an increase in pressure inside the space. Therefore, the insulating container according to claim 1 eliminates the possibility that the container itself is deformed or the content of the container moves up and then goes out of the container.

Applicants submit that Dais and Usui, taken separately or combined, fail to teach or suggest all of the limitations of independent claim 1, as amended.

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Dais is directed to a cooling container which stores a variety of products within the container and maintains such products at a reduced temperature. The cooling container comprises a sealed cavity (51) defined by the first container portion (39) and the second container portion (42), and a coolant disposed within the sealed cavity (51). Accordingly, it is essential to hermetically seal the inner space so as to prevent the coolant from leaking and Applicants submit that one of ordinary skill in the art would not modify Dais to allow air to constantly flow between the inner space defined by the bottom portion of the container body and the outer shell, and the outside of the container. Dais also teaches that the first base portion (54) of the first container portion (39) of the container (36) is joined to the second base portion (57) of the second container portion (42) by the first and second connection regions (63, 66). In this case, the projection portion (69) of the base portion (54) is vibration welded to the opening (72) of the base portion (57). Please note FIGS. 1-5 and column 4, line 10 to column 5, line 60 of Dais.

Additionally, Dais teaches that pressure within the sealed cavity (51) is increased by expansion of the coolant caused by a temperature outside the container, as opposed to inside the container. The increased pressure then acts on the base portion (54) to deform the connection member (63) of the base portion (54) and draw the projection portion (69) out of the opening (72), so that the connection members (63, 66) are partially separated. Whereby, the space defined by the base portion of the first container portion (39) and the second container portion (42) is opened to the outside. That is, Dais teaches that the space between the first base portion (54) and the second base portion (57) is formed as an emergency measure. Furthermore, Dais teaches that the connection member (63) is only deformed during an emergency. Thus, Dais does not teach or suggest that a horizontal annular extension is formed with a distance defined between the horizontal annular extension and a bottom portion of the container body, as is claimed in claim 1, as amended.

With the above structure of Dais, when the coolant within the sealed cavity (51) rapidly expands with both the base portions (54, 57) joined to each other and hence the pressure increases, the connection members (63, 66) of the base portions (54, 57) are rapidly separated, which may cause the contents to be forced out of the sealed cavity (51). Thus, the container

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claimed in claim 1, as amended, is different in structure from the container taught by Dais and Dais does not produce the same functional effect as the container of the claimed invention.

Usui is cited for the teaching of a heat insulating container that includes an outer shell (4) formed by a foamed resin sheet exhibiting heat shrinkability. Accordingly, the heat insulating container of Usui is different in structure and function from the cooling container taught by Dais. Furthermore, Usui teaches that the space defined by the container body and the outer shell is constantly closed. Thus, Usui does not teach or suggest bringing an outside and an inside of the container into communication with each other to allow for air flow therebetween.

Also, the container body taught by Usui has an inherently secured strength and no object is found to prevent deformation of the tubular portion in the radial direction due to external force. Thus, unlike the claimed invention, there is no teaching or suggesting in Usui to provide an annular portion, and therefore the container taught by Usui is different in structure from the heat insulating container of the claimed invention and does not provide the same functional effect as the container of the claimed invention.

The containers of both Dais and Usui are different in principle and function from each other. Specifically, the container taught by Dais is configured to open the space between the bottom of the first and second container portions in a time of emergency. On the other hand, the container taught by Usui is configured to keep the space between the bottom of the container body and the outer shell constantly closed. Thus, one of ordinary skill in the art would see no rational benefit to combine the teachings of Dais and Usui to form a modified container.

Even if one having ordinary skill in the art were to combine the teachings of Dais and Usui as proposed by the Office Action, the space between the bottom portion of the container body and the outer shell would only be opened in a time of emergency. Thus, Applicants submit that it is not possible to achieve the container of the claimed invention, which is constantly open to the outside. Usui, therefore, fails to fairly suggest a modification to the container taught by Dais that achieves the invention claimed in claim 1, as amended.

Applicants submit that claim 1, as amended, is allowable for at least the foregoing reasons, as the prior art of record, including Dais and Usui, does not teach or suggest all of the

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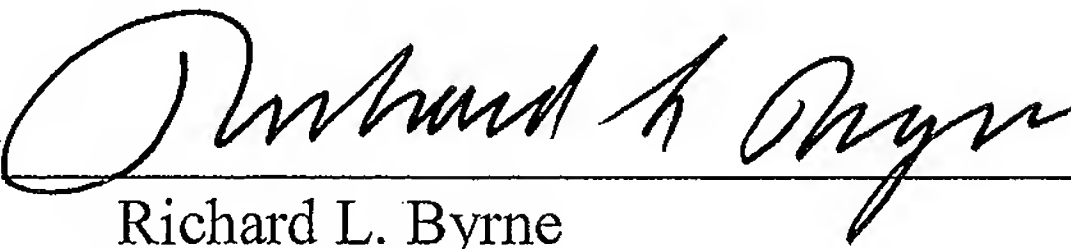
limitations of claim 1. Applicants respectfully request that the rejection of this claim be withdrawn.

CONCLUSION

Based on the foregoing amendments and remarks, reconsideration of the rejections and allowance of pending claim 1 are respectfully requested.

Respectfully submitted,

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